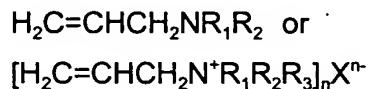


## ABSTRACT

### USE OF N-ALLYL SUBSTITUTED AMINES AND THEIR SALTS AS BRIGHTENING AGENTS IN NICKEL PLATING BATHS

An aqueous acidic plating bath for the electrodeposition of a nickel or nickel alloy deposit. The bath includes nickel ions and an additive having the general formula:



wherein  $\text{R}_1$ ,  $\text{R}_2$  and  $\text{R}_3$  are selected from the functional groups consisting of hydrogen, methyl, ethyl, propyl, allyl, propyn, propanediol and combinations thereof; and  $\text{X}^n$  is an  $n$ -valent inorganic or organic anion.